

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE MODIFICATION OF INTERSECTION OF US 50 (SUNBURST HWY) AT CRUSADER RD TO INCLUDE COUNTDOWN PEDESTRIAN SIGNAL HEADS AND ACCESSIBLE PEDESTRIAN PUSHBUTTONS AND SIGNS. US 50 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA SIX-PHASE FULL-TRAFFIC-ACTUATED MODE WITH AN ALTERNATE PEDESTRIAN PHASE FOR THE EAST LEG AND CONCURRENT PEDESTRIAN PHASES FOR THE NORTH AND SOUTH LEGS OF THE INTERSECTION. THE US 50 EASTBOUND AND WESTBOUND LEFT TURNS OPERATE IN EXCLUSIVE-PERMISSIVE PHASING. THE CRUSADER RD APPROACHES OPERATE IN SPLIT PHASING. EMERGENCY PRE-EMPTION PHASES ARE PROVIDED FOR THE NORTH, SOUTH AND EAST APPROACHES.

CONTROLLER REQUIREMENTS

THE EXISTING FULL-TRAFFIC-ACTUATED EIGHT-PHASE TRAFFIC SIGNAL CONTROLLER HOUSED IN A BASE MOUNTED CABINET SHALL REMAIN. A 2-WIRE APS CENTRAL CONTROL UNIT SHALL BE FURNISHED BY THE CONTRACTOR AND INSTALLED BY SHA.

SPECIAL NOTES

APS WILL FUNCTION AS FOLLOWS:

TO CROSS US 50 (SUNBURST HIGHWAY):

- A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT MESSAGE WILL BE "WAIT TO CROSS SUNBURST AT CRUSADER. WAIT."
- B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

TO CROSS CRUSADER ROAD:

- A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT MESSAGE WILL BE "WAIT TO CROSS CRUSADER AT SUNBURST. WAIT."
- B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

CONTACT PERSONS FOR DISTRICT #1 ARE AS FOLLOWS:

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ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
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CONTACT PERSONS FOR OOTS ARE AS FOLLOWS:

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MR. EUGENE BAILEY
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GENERAL NOTES

1. THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE LOCATIONS PRIOR TO INSTALLATION.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLE TO THE APPROPRIATE TERMINALS AND PROPERLY LABELING EACH CABLE.
3. ALL UNUSED CABLE SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.
4. UNDERGROUND UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING "MISS UTILITY" PRIOR TO CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN THE UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
5. ALL PEDESTAL FOUNDATION TOPS SHALL BE INSTALLED FLUSH WITH SIDEWALK GRADE.
6. LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTONS MUST MEET LOCATION REQUIREMENTS OF THE LATEST MD-MUTC CHAPTER 4 "PEDESTRIAN CONTROL FEATURES," SEC. 4E.08 AND THE LATEST NCHRP PUBLICATION, "ACCESSIBLE PEDESTRIAN SIGNALS GUIDE TO BEST PRACTICE." NOTE: SHOULD FIELD CONDITIONS RESULT WHERE EQUIPMENT PLACEMENTS CANNOT BE MET AND MAY REQUIRE AN ALTERNATE FIELD LOCATION OF SUCH PEDESTRIAN EQUIPMENT DEVICES, THE CONTRACTOR SHALL STOP ALL WORK AND NOTIFY THE SHA ENGINEER FOR REVIEW. AN ALTERNATE DESIGN WAVIER MAY BE NECESSARY AND OBTAINED FOR THE APPROVAL BY THE DIRECTOR, OFFICE OF TRAFFIC & SAFETY.
7. PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR REACHING LESS THAN 18" FROM A 60" X 60" LEVEL LANDING AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
8. THE 10' SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON. NOT CENTER OF POLE TO CENTER OF POLE.
9. PUSHBUTTON ARROWS AND SIGNS ARE TO BE ORIENTED PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
10. EXISTING HANDHOLES SHALL HAVE NEW FRAME AND COVERS AS NOTED ON PLANS. POUR COLLARS AROUND ALL HANDHOLES INVOLVED.

EQUIPMENT LIST "A, B & C"

A. EQUIPMENT TO BE SUPPLIED BY SHA.

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
9571	SHEET ALUMINUM MAST ARM / POLE MOUNTED SIGN 6 - R10-3(1) 9"X15"	SF	6

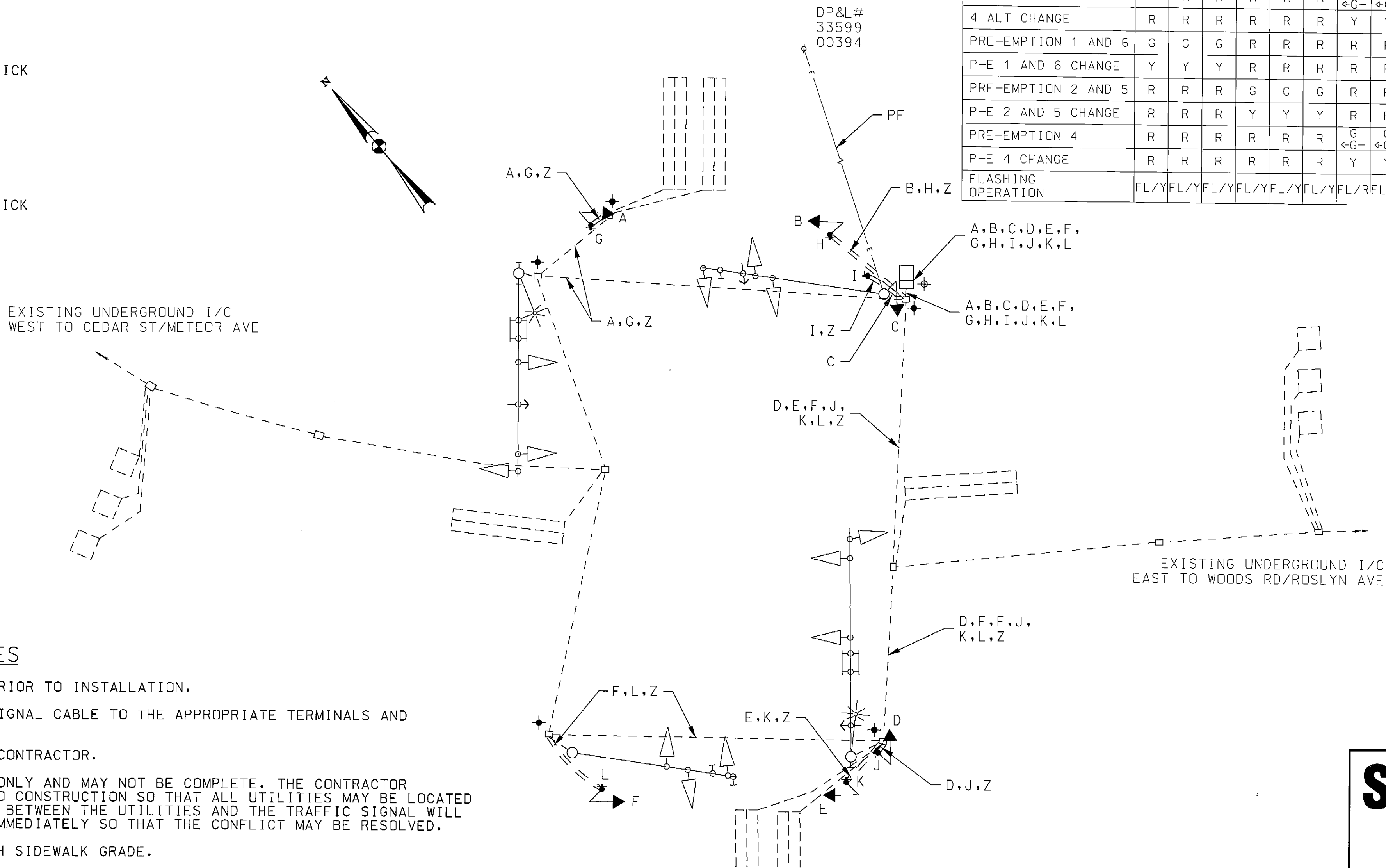
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
1002	REMOVAL OF EXISTING PAVEMENT LINE MARKINGS, ANY WIDTH	LF	620
5005	12 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS	LF	680
8001	FURNISH AND INSTALL AUDIBLE / TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS	EA	6
8002	FURNISH AND INSTALL BREAKWAY PEDESTAL POLE - ANY SIZE	EA	6
8003	FURNISH AND INSTALL LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEADS	EA	1
8004	REMOVE AND DISPOSE PER ASSIGNMENT	EA	1
8007	FURNISH AND INSTALL UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED	LF	95
8009	ADJUST EXISTING HANDHOLE	EA	5
8010	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE	LF	450
8013	INSTALL GROUND MOUNTED SIGN	SF	6
8016	GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH	EA	5
8017	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE	EA	1
8018	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)	LF	860
8019	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)	LF	890

C. ALL MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

PHASING CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
PHASE 1 AND 5	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
1 AND 5 CHANGE TO 1 AND 6, 2 AND 5, OR 2 AND 6	G	G	G	G	G	G	G	G	G	G	G	G	DW	DW	DW	DW	DW	DW
PHASE 1 AND 6	G	G	G	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
1 AND 6 CHANGE	G	G	G	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 2 AND 5	R	R	R	G	G	G	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
2 AND 5 CHANGE	R	R	R	G	G	G	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 2 AND 6	G	G	G	G	G	G	R	R	R	R	R	R	DW	DW	WK	WK	WK	WK
PED CLEARANCE	G	G	G	G	G	G	R	R	R	R	R	R	DW	DW	FL/DW	FL/DW	FL/DW	FL/DW
2 AND 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 3	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
3 CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 4	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
4 CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 4 ALT	R	R	R	R	R	R	R	R	R	R	R	R	WK	WK	DW	DW	DW	DW
PED CLEARANCE	R	R	R	R	R	R	R	R	R	R	R	R	FL/DW	FL/DW	DW	DW	DW	DW
4 ALT CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PRE-EMPTION 1 AND 6	G	G	G	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
P-E 1 AND 6 CHANGE	Y	Y	Y	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PRE-EMPTION 2 AND 5	R	R	R	G	G	G	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
P-E 2 AND 5 CHANGE	R	R	R	Y	Y	Y	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PRE-EMPTION 4	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
P-E 4 CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	RDARK	RDARK	RDARK	RDARK	RDARK	RDARK



WIRING KEY	
A,B,C, D,E,F	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
G,H,I, J,K,L	2-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
Z	STRANDED BARE COPPER GROUND WIRE (NO. 6 AWG)
PF	EXISTING OVERHEAD POWER FEED
⊕	EXISTING GROUND ROD
⬤	PROPOSED GROUND ROD

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REVISIONS		GENERAL INFORMATION SHEET	
SCALE NONE DATE FEBRUARY 2013 CONTRACT NO. XX1285133		DESIGNED BY WFW COUNTY DORCHESTER	
DRAWN BY WFW LOGMILE 09005001.38		CHECKED BY BJG TMS NO. L603	
FAP NO. TOD NO.		TS NO. 340H-01 DRAWING SP-6 OF 6 SHEET NO. OF	